					DEPARTMENT	ATE OF UTAH OF NATURAL RESO F OIL, GAS AND M				AMENDE	FOR D REPORT		
			APPLICATIO	N FOR	PERMIT TO DRILL				1. WELL NAME and NU	JMBER .C Tribal 8	H-24-46		
2. TYPE O	F WORK	DRILL NEW WE	LL 📵 REE	NTER P&	A WELL DEEPEN	WELL (3. FIELD OR WILDCAT	r ALTAMO	ONT		
4. TYPE O	F WELL		Oil Well	Coalbe	d Methane Well: NO				5. UNIT or COMMUNIT	FIZATION A	GREEME	NT NAM	E
6. NAME (OF OPERATOR			LL BARRE					7. OPERATOR PHONE	303 312-	8164		
8. ADDRE	SS OF OPERAT				0, Denver, CO, 80202				9. OPERATOR E-MAIL			om.	
	AL LEASE NUI ., INDIAN, OR	MBER STATE)		0.0 200	11. MINERAL OWNERS	HIP)	FEE (12. SURFACE OWNERS		STATE (:E ()
13. NAME	OF SURFACE	20G0005500 OWNER (if box 1	12 = 'fee')	UDW					14. SURFACE OWNER	-		~	
15. ADDR	ESS OF SURF	ACE OWNER (if b			110, Salt Lake City, UT	94114			16. SURFACE OWNER	R E-MAIL (i	f box 12 =	: 'fee')	
17. INDIAI	N ALLOTTEE (OR TRIBE NAME	st North Temp	ie Suite 2	18. INTEND TO COMM	INGLE PRODUCTION	I FRO	M M	19. SLANT				
(if box 12	= 'INDIAN')	Jte Indian Tribe			YES (Submit C	ommingling Applicati	on)	NO 📵	VERTICAL DIF	RECTIONAL) но	RIZONT	AL 📵
20. LOC	TION OF WEL	L		FO	OTAGES	QTR-QTR		SECTION	TOWNSHIP	RAN	IGE	МЕ	RIDIAN
LOCATIO	N AT SURFAC	E		2158 FI	NL 859 FWL	SWNW		24	4.0 S	6.0	W		U
Top of U	ppermost Pro	ducing Zone		2133 FN	L 1399 FWL	SENW		24	4.0 S	6.0	W		U
At Total	Depth			1980 F	NL 700 FEL	SENE		24	4.0 S	6.0	W		U
21. COUN	TY	DUCHESNE			22. DISTANCE TO NEA	REST LEASE LINE (F	eet)		23. NUMBER OF ACRE	ES IN DRILI 640	ING UNIT		
					25. DISTANCE TO NEAR (Applied For Drilling of		P00	L	26. PROPOSED DEPTI	+ 0: 9518 T	VD: 6222		
27. ELEV	ATION - GROU	ND LEVEL			28. BOND NUMBER				29. SOURCE OF DRILI WATER RIGHTS APPR			PLICABL	.E
		6753				LPM8874725				43-18			
String	Hole Size	Casing Size	Length	Weigh	_	and Cement Info	rmat	tion	Cement		Sacks	Yield	Weight
COND	26	16	0 - 80	65.0	Unknown	8.8	\vdash		No Used		0	0.0	0.0
SURF	12.25	9.625	0 - 1800	36.0	J-55 ST&C	8.8		Halliburto	n Light , Type Unkr	nown	240	3.16	11.0
								Halliburton	Premium , Type Un	known	210	1.36	14.8
I1	8.75	7	0 - 6343	26.0	P-110 LT&C	9.2	┺		Unknown		280	3.14	14.8
L1	6.125	4.5	0 - 9518	11.6	P-110 LT&C	9.5	⊬		Unknown No Used		140	0.0	0.0
<u> </u>	0.125	4.5	0 - 9310	11.0		TTACHMENTS			No Oseu		0	0.0	0.0
					^	T A OTHER LATE							
	VE	RIFY THE FOLL	OWING ARE	E ATTAC	HED IN ACCORDAN	CE WITH THE UTA	AH O	IL AND GAS	CONSERVATION G	ENERAL	RULES		
⊮ w	ELL PLAT OR I	MAP PREPARED B	Y LICENSED S	SURVEYO	R OR ENGINEER	№ сом	PLET	E DRILLING PI	AN				
I ✓ AF	FIDAVIT OF ST	ATUS OF SURFAC	CE OWNER AG	REEMEN	T (IF FEE SURFACE)	FORM	1 5. IF	OPERATOR IS	OTHER THAN THE LE	EASE OWN	ER		
I ✓ DIF	RECTIONAL SU	JRVEY PLAN (IF D	DIRECTIONALL	Y OR HO	RIZONTALLY DRILLED)	торо	GRAI	PHICAL MAP					
NAME V	enessa Langma	cher		TITL	E Senior Permit Analyst			PHONE 303	312-8172				
SIGNATU	RE			DAT	E 08/23/2012			EMAIL vlang	macher@billbarrettcorp	o.com			
	ber assignei)1351669			APP	ROVAL			Bol	Manager				

DRILLING PLAN

BILL BARRETT CORPORATION

LC Tribal 8H-24-46

SHL: SW NW, 2158' FNL and 859' FWL, Section 24, T4S-R6W BHL: SE NE, 1980' FNL and 700' FEL, Section 24, T4S-R6W Duchesne Co., UT

Bill Barrett Corporation (BBC) intends to drill a horizontal through the prospective zone within the Uteland Butte.

1 - 3. <u>Estimated Tops of Geological Markers and Formations Expected to Contain Water, Oil and Gas and Other Minerals</u>

HORIZONTAL LEG FORMATION TOPS

Formation	Depth – MD	Depth - TVD
Green River	1,952'	1,952'
Surface casing	1,800'	1,800'
Mahogany	2,672'	2,672'
TGR3	3,797'	3,797'
Douglas Creek	4,622'	4,622'
3 PT Marker	5,007'	5,007'
Black Shale Facies	5,437'	5,437'
Castle Peak	5,651'	5,648'
*Uteland Butte	6,027'	5,945'
CR1	6,142'	6,001'
TD	9,518'	6,222'

*PROSPECTIVE PAY

The Uteland Butte CR1 is the primary objective for oil/gas.

Base of Useable Water = 1,267'

4. Casing Program

Hole	SETTING DEPTH		Casing	Casing	Casing		
<u>Size</u>	(FROM)	(TO)	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Thread</u>	Condition
12-1/4"	surface	1,800'	9 5/8"	36.0 ppf	J or K 55	ST&C	New
8 3/4"	surface	6,343'	7"	26.0 ppf	P-110	LT&C	New
6 1/8"	surface	9,518'	4 1/2"	11.6 ppf	P-110	LT&C	New
			Liner with				
			4-1/2"				
			Tieback				
			for frac				

Drilling Plan LC Tribal 8H-24-46 Duchesne Co., UT

5. <u>Cementing Program</u>

9 5/8" Surface Casing	Lead with approximately 240 sx Halliburton Light Premium cement with additives mixed at 11.0 ppg (yield = 3.16 ft ³ /sx). TOC @ Surface Tail with 210 sx Premium 14.8 ppg (yield = 1.36 ft ³ /sx) calculated hole volume with 75% excess. TOC @ 1,300' Top out cement, if required: 100 sx of Premium cement with additives mixed at 15.8 ppg (yield = 1.17 ft ³ /sk)
7" Intermediate Casing	Lead with approximately 280 sx Tune Light cement with additives, mixed at 11.0 ppg (yield = 3.14 ft ³ /sx). TOC @ 1,300' Tail with approximately 140 sx Halliburton Econocem cement with additives mixed at 13.5 ppg (yield = 1.42 ft ³ /sx). TOC @ 4,474'
6-1/8" hole for	Depending on hole conditions, plan to run un-cemented 4-
4-1/2" production liner	1/2" liner with open hole packers
	or
	cement w/ 400 sx ECONOCEM w/ additives, 13.5 ppg, 1.4
	ft3/sx, 50% excess. Planned TOC @ 4-1/2" liner top
NI. 4 T C.T 1	4 1'.44.' '11.1

Note: Top of Tail cement for the intermediate string will be calculated to 1000' above the KOP using gauge hole plus 50% excess. Lead to 200' inside of surface casing.

6. Mud Program

<u>Interval</u>	Weight	Viscosity	Fluid Loss (API filtrate)	<u>Remarks</u>
40' - 1,800'	8.4 - 8.8	26 - 36	NC	Freshwater Spud Mud Fluid
				System
1,800' - 6,343'	8.9 - 9.2	26 - 36	NC	Fresh Water with sweeps
6,343' – TD	9.0 - 9.5	45 - 58	4 - 10	Fresh Water PHPA

Note: Sufficient mud materials to maintain mud properties, control lost circulation and to contain "kicks" will be available at wellsite. BBC may require minor amounts of diesel to be added to its fluid system in order to reduce torque and drag.

7. BOP and Pressure Containment Data

Depth Intervals	BOP Equipment
0-1,800	No pressure control required
1,800' – TD	11" 5000# Ram Type BOP
	11" 5000# Annular BOP
- Drilling spool to a	accommodate choke and kill lines;
- Ancillary and cho	ke manifold to be rated @ 5000 psi:

- Ancillary and choke manifold to be rated @ 5000 psi;
- Ancillary equipment and choke manifold rated at 5,000#. All BOP and BOPE tests will be in accordance with the requirements of onshore Order No. 2;
- The BLM and the State of Utah Division of Oil, Gas and Mining will be notified 24 hours in advance of all BOP pressure tests.
- BOP hand wheels may be underneath the sub-structure of the rig if the drilling rig used is set up to operate most efficiently in this manner.

Drilling Plan LC Tribal 8H-24-46 Duchesne Co., UT

8. <u>Auxiliary Equipment</u>

- a) Upper kelly cock; lower Kelly cock will be installed while drilling
- b) Inside BOP or stab-in valve (available on rig floor)
- c) Safety valve(s) and subs to fit all string connections in use
- d) Mud monitoring will be visually observed

9. <u>Testing, Logging and Core Programs</u>

Cores	None anticipated;
Testing	None anticipated; drill stem tests may be run on shows of interest;
Sampling	30' to 50' samples; surface casing to TD. Preserve samples all show intervals;
Surveys	MWD with GR as needed to land wellbore;
WL Logging	None in intermediate
Note: FMI an	d CAL may be run on the lateral portion of the horizontal wellbore at the geologist's
discretion.	

10. Anticipated Abnormal Pressures or Temperatures

No abnormal pressures or temperatures or other hazards are anticipated.

Maximum anticipated bottom hole pressure equals approximately 3073 psi* and maximum anticipated surface pressure equals approximately 1704 psi** (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

*Max Mud Wt x 0.052 x TD = A (bottom hole pressure)

11. Location and Type of Water Supply

Water for the drilling and completion will be trucked from the Duchesne City Culinary Water Dock located in Sec. 1, T4S, R5W.

12. Drilling Schedule

Location Construction: June 2013 Spud: June 2013

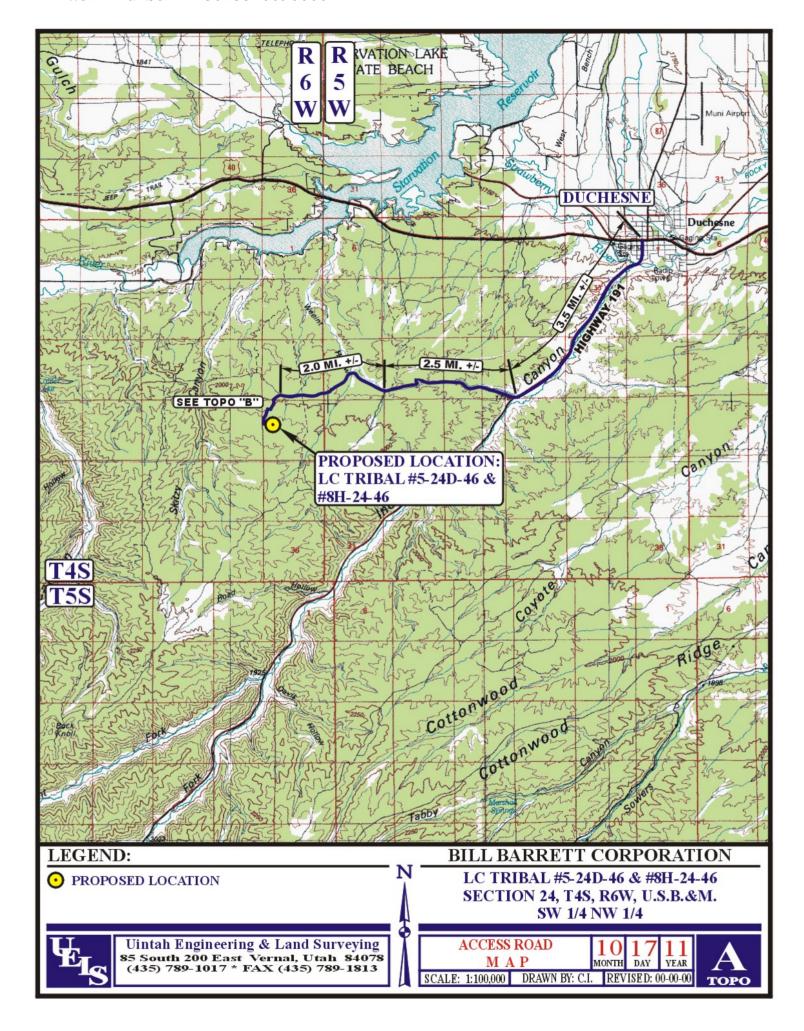
Duration: 25 days drilling time

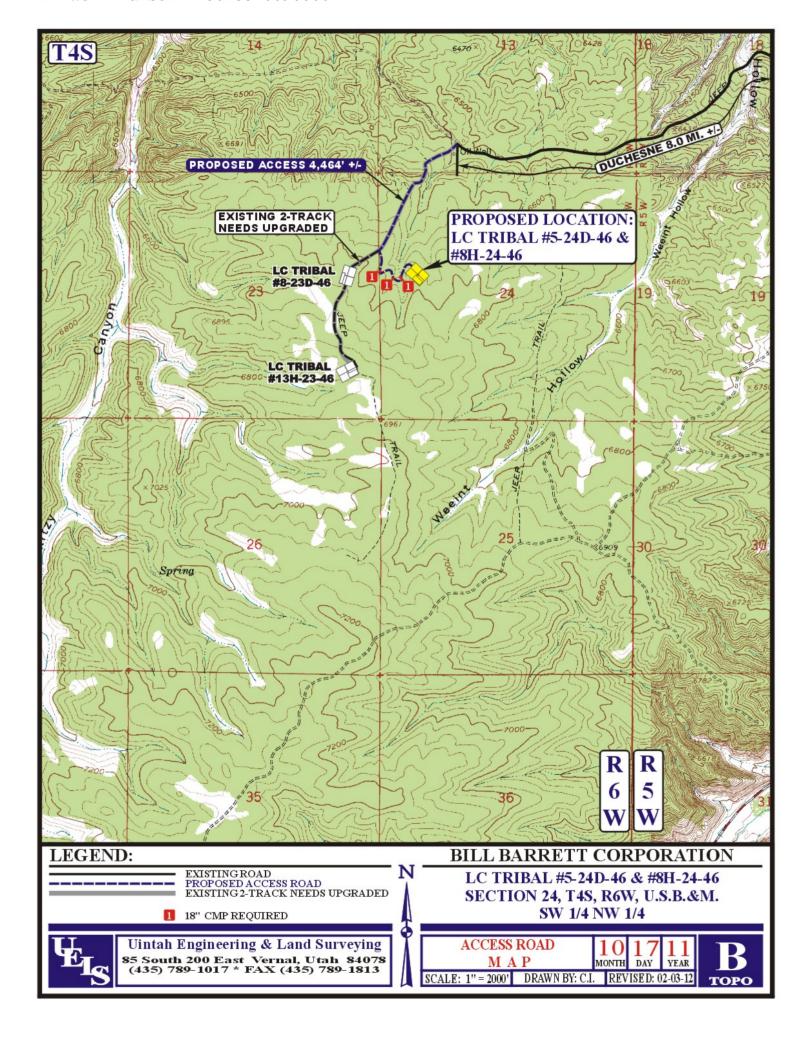
25 days completion time

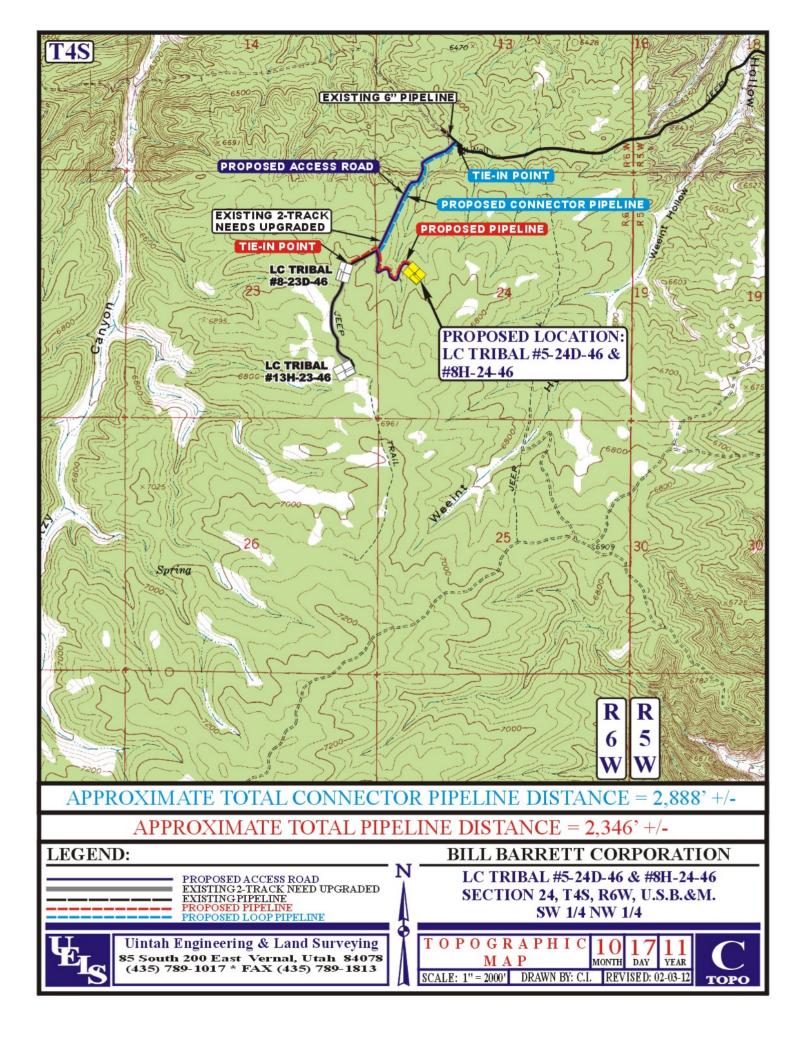
^{**}Maximum surface pressure = A - (0.22 x TD)

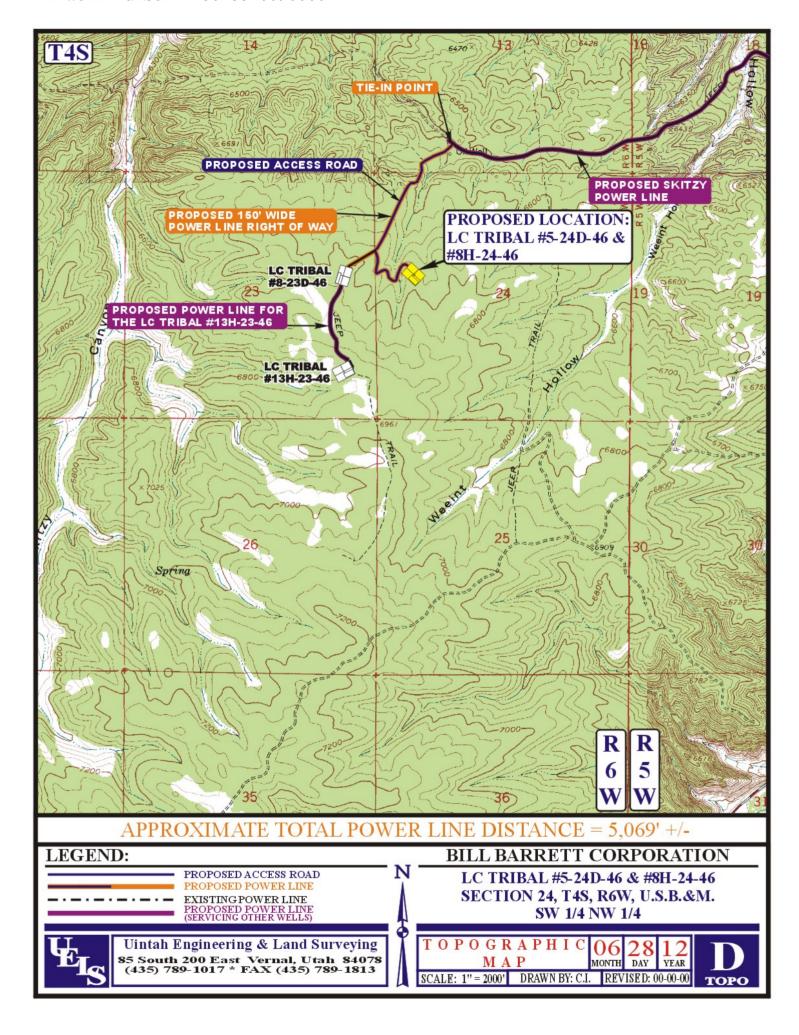
RECEIVED:

August











COMPANY DETAILS: BILL BARRETT CORP

Calculation Method: Minimum Curvature

Error System: ISCWSA

Scan Method: Closest Approach 3D Error Surface: Elliptical Conic Warning Method: Error Ratio SITE DETAILS: 8H-24-46 LC Tribal Lake Canyon

Site Latitude: 40° 7' 11.269 N Site Longitude: 110° 31' 2.240 W

Positional Uncertainity: 0.0 Convergence: 0.63 Local North: True

WELL DETAILS: 8H-24-46 LC Tribal

Ground Level: 6752.0

+N/-S +E/-W Northing Easting Latittude Longitude Slot 0.0 0.0 652190.94 2274814.83 40° 7' 11.269 N 110° 31' 2.240 W

WELLBORE TARGET DETAILS (LAT/LONG)

Name TVD +N/-S +E/-W Latitude Longitude Shape

8H-24-46 PBHL 6222.0 177.3 3707.1 40° 7′ 13.019 N 110° 30′ 14.519 W Rectangle (Sides: L200.0 W200.0)

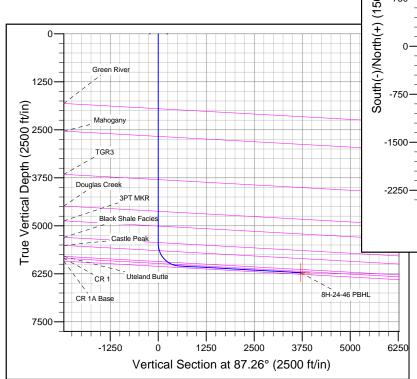
SECTION DETAILS

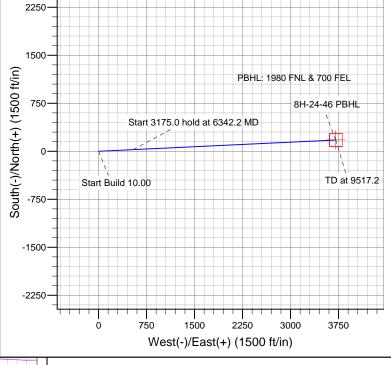
Sec MD Inc Azi TVD +N/-S +E/-W DLeg VSec Target TFace 0.00 0.00 0.00 0.0 0.0 0.0 0.0 0.0 0.00 5474.9 0.00 0.00 5474.9 0.0 0.0 0.00 0.00 0.0 6047.0 25.9 540.8 6343.3 86.84 87.26 10.00 87.26 541.4 4 9518.1 86.84 87.26 6222.0 177.3 3707.1 0.00 0.00 3711.3 9518.1 0.00 0.00 6222.0 177.3 3707.1 0.00 180.00 3711.3 8H-24-46 PBHL

FO	RMATION T	OP DETAILS
TVDPath	MDPath	Formation
		CR 1A Base
1952.0	1952.0	Green River
2672.0	2672.0	Mahogany
3797.0	3797.0	TGR3
4622.0	4622.0	Douglas Creek
5007.0	5007.0	3PT MKR
5437.0	5437.0	Black Shale Facies
5648.5	5651.3	Castle Peak
5945.7	6027.4	Uteland Butte
6001.3	6142.2	CR 1

CASING DETAILS

No casing data is available





T M

Azimuths to True North Magnetic North: 11.36°

Magnetic Field Strength: 52122.7snT Dip Angle: 65.74° Date: 8/6/2012 Model: IGRF2010

CELVED: August 23 201

Planning Report

Database: Compass

Company: BILL BARRETT CORP

Project: DUCHESNE COUNTY, UT (NAD 27)

 Site:
 8H-24-46 LC Tribal

 Well:
 8H-24-46 LC Tribal

 Wellbore:
 8H-24-46 LC Tribal

 Design:
 Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well 8H-24-46 LC Tribal

KB @ 6767.0ft (Original Well Elev) KB @ 6767.0ft (Original Well Elev)

True

Minimum Curvature

Project DUCHESNE COUNTY, UT (NAD 27)

Map System: US State Plane 1927 (Exact solution)

Geo Datum: NAD 1927 (NADCON CONUS)

Map Zone: Utah Central 4302

System Datum: Ground Level

Site 8H-24-46 LC Tribal

Northing: 652,190.95 ft Site Position: Latitude: 40° 7' 11.269 N 110° 31' 2.240 W Easting: 2,274,814.83 ft From: Lat/Long Longitude: Grid Convergence: **Position Uncertainty:** 0.0 ft Slot Radius: 0.63°

Well 8H-24-46 LC Tribal

 Well Position
 +N/-S
 0.0 ft
 Northing:
 652,190.94 ft
 Latitude:
 40° 7' 11.269 N

 +E/-W
 0.0 ft
 Easting:
 2,274,814.83 ft
 Longitude:
 110° 31' 2.240 W

Position Uncertainty0.0 ftWellhead Elevation:ftGround Level:6,752.0 ft

Wellbore 8H-24-46 LC Tribal Magnetics **Model Name** Sample Date Declination Dip Angle Field Strength (°) (°) (nT) IGRF2010 8/6/2012 11.36 65.74 52,123

Design #1 Design Audit Notes: Version: Phase: **PLAN** Tie On Depth: 0.0 Depth From (TVD) +N/-S Vertical Section: +E/-W Direction (ft) (ft) (ft) (°) 0.0 87.26 0.0 0.0

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,474.9	0.00	0.00	5,474.9	0.0	0.0	0.00	0.00	0.00	0.00	
6,343.3	86.84	87.26	6,047.0	25.9	540.8	10.00	10.00	0.00	87.26	
9,518.1	86.84	87.26	6,222.0	177.3	3,707.1	0.00	0.00	0.00	0.00	
9,518.1	0.00	0.00	6,222.0	177.3	3,707.1	0.00	0.00	0.00	180.00	8H-24-46 PBHL

Planning Report

Database: Compass

Company: BILL BARRETT CORP

Project: DUCHESNE COUNTY, UT (NAD 27)

 Site:
 8H-24-46 LC Tribal

 Well:
 8H-24-46 LC Tribal

 Wellbore:
 8H-24-46 LC Tribal

 Design:
 Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well 8H-24-46 LC Tribal

KB @ 6767.0ft (Original Well Elev) KB @ 6767.0ft (Original Well Elev)

True

Minimum Curvature

·y···											
nned Survey											
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)		
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00		
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00		
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00		
300.0	0.00	0.00	300.0	0.0	0.0		0.00	0.00	0.00		
						0.0					
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00		
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00		
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00		
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00		
800.0	0.00		800.0								
		0.00		0.0	0.0	0.0	0.00	0.00	0.00		
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00		
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00		
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00		
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00		
			,								
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00		
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00		
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00		
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00		
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00		
	0.00			0.0							
1,800.0		0.00	1,800.0		0.0	0.0	0.00	0.00	0.00		
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00		
1,952.0	0.00	0.00	1,952.0	0.0	0.0	0.0	0.00	0.00	0.00		
Green River			,								
	0.00	0.00	2 200 0	0.0	0.0	0.0	0.00	0.00	0.00		
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00		
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00		
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00		
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00		
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00		
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00		
,			,								
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00		
2,672.0	0.00	0.00	2,672.0	0.0	0.0	0.0	0.00	0.00	0.00		
Mahogany											
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00		
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00		
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00		
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00		
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00		
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00		
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00		
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00		
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00		
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00		
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00		
3,797.0	0.00	0.00	3,797.0	0.0	0.0	0.0	0.00	0.00	0.00		
TGR3											
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00		
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00		
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00		
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00		
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00		
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00		
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00		
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00		
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00		
	0.00	0.00		0.0	0.0				0.00		
4,600.0		() ()()	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00		

Planning Report

Database: Compass

Company: BILL BARRETT CORP

Project: DUCHESNE COUNTY, UT (NAD 27)

 Site:
 8H-24-46 LC Tribal

 Well:
 8H-24-46 LC Tribal

 Wellbore:
 8H-24-46 LC Tribal

 Design:
 Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well 8H-24-46 LC Tribal

KB @ 6767.0ft (Original Well Elev) KB @ 6767.0ft (Original Well Elev)

True

Minimum Curvature

1:	Design #1								
ed Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,622.0	0.00	0.00	4,622.0	0.0	0.0	0.0	0.00	0.00	0.00
Douglas Cr	eek								
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,007.0	0.00	0.00	5,007.0	0.0	0.0	0.0	0.00	0.00	0.00
3PT MKR									
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,437.0	0.00	0.00	5,437.0	0.0	0.0	0.0	0.00	0.00	0.00
Black Shale	Facies								
5,474.9	0.00	0.00	5,474.9	0.0	0.0	0.0	0.00	0.00	0.00
Start Build	10.00								
5,500.0	2.51	87.26	5,500.0	0.0	0.5	0.5	10.00	10.00	0.00
5,600.0	12.51	87.26	5,599.0	0.6	13.6	13.6	10.00	10.00	0.00
5,651.3	17.64	87.26	5,648.5	1.3	26.9	26.9	10.00	10.00	0.00
Castle Peak	•								
5,700.0	22.51	87.26	5,694.3	2.1	43.6	43.7	10.00	10.00	0.00
5,800.0	32.51	87.26	5,782.8	4.3	89.7	89.8	10.00	10.00	0.00
5,900.0	42.51	87.26	5,862.1	7.2	150.4	150.6	10.00	10.00	0.00
6,000.0	52.51	87.26	5,929.5	10.7	224.0	224.2	10.00	10.00	0.00
6,027.4	55.25	87.26	5,945.7	11.8	246.1	246.4	10.00	10.00	0.00
Uteland But	tte								
6,100.0	62.51	87.26	5,983.2	14.7	308.1	308.5	10.00	10.00	0.00
6,142.2	66.73	87.26	6,001.3	16.6	346.2	346.6	10.00	10.00	0.00
CR 1									
6,200.0	72.51	87.26	6,021.4	19.1	400.3	400.8	10.00	10.00	0.00
6,300.0	82.51	87.26	6,043.0	23.8	497.7	498.3	10.00	10.00	0.00
6,343.3	86.84	87.26	6,047.0	25.9	540.8	541.4	10.00	10.00	0.00
Start 3174.8	8 hold at 6343.3 N	ND							
6,400.0	86.84	87.26	6,050.1	28.6	597.3	598.0	0.00	0.00	0.00
6,500.0	86.84	87.26	6,055.6	33.3	697.0	697.8	0.00	0.00	0.00
6,600.0	86.84	87.26	6,061.1	38.1	796.8	797.7	0.00	0.00	0.00
6,700.0	86.84	87.26	6,066.7	42.9	896.5	897.5	0.00	0.00	0.00
6,800.0	86.84	87.26	6,072.2	47.7	996.2	997.4	0.00	0.00	0.00
6,900.0	86.84	87.26	6,077.7	52.4	1,096.0	1,097.2	0.00	0.00	0.00
7,000.0	86.84	87.26	6,083.2	57.2	1,195.7	1,197.1	0.00	0.00	0.00
7,100.0	86.84	87.26	6,088.7	62.0	1,295.4	1,296.9	0.00	0.00	0.00
7,200.0	86.84	87.26	6,094.2	66.7	1,395.2	1,396.8	0.00	0.00	0.00
7,300.0	86.84	87.26	6,099.7	71.5	1,494.9	1,496.6	0.00	0.00	0.00
7,400.0	86.84	87.26	6,105.2	76.3	1,594.6	1,596.5	0.00	0.00	0.00
7,500.0	86.84	87.26	6,110.8	81.0	1,694.4	1,696.3	0.00	0.00	0.00
7,600.0	86.84	87.26	6,116.3	85.8	1,794.1	1,796.2	0.00	0.00	0.00
7,700.0	86.84	87.26	6,121.8	90.6	1,893.8	1,896.0	0.00	0.00	0.00
7,800.0	86.84	87.26	6,127.3	95.4	1,993.6	1,995.9	0.00	0.00	0.00
7,900.0	86.84	87.26	6,132.8	100.1	2,093.3	2,095.7	0.00	0.00	0.00
8,000.0	86.84	87.26	6,138.3	104.9	2,193.0	2,195.6	0.00	0.00	0.00
8,100.0	86.84	87.26	6,143.8	109.7	2,292.8	2,295.4	0.00	0.00	0.00
8,200.0	86.84	87.26	6,149.3	114.4	2,392.5	2,395.2	0.00	0.00	0.00
8,300.0	86.84	87.26	6,154.9	119.2	2,492.2	2,495.1	0.00	0.00	0.00

Planning Report

Database: Compass

Company: BILL BARRETT CORP

Project: DUCHESNE COUNTY, UT (NAD 27)

 Site:
 8H-24-46 LC Tribal

 Well:
 8H-24-46 LC Tribal

 Wellbore:
 8H-24-46 LC Tribal

 Design:
 Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well 8H-24-46 LC Tribal

KB @ 6767.0ft (Original Well Elev) KB @ 6767.0ft (Original Well Elev)

True

Minimum Curvature

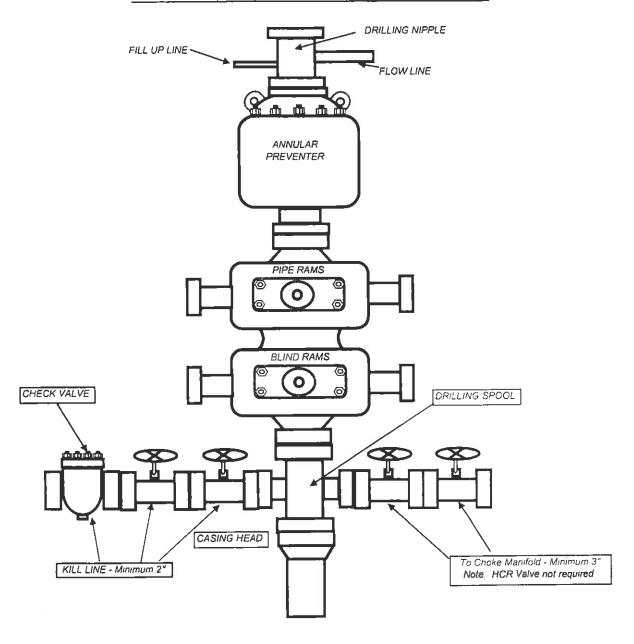
ned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,400.0	86.84	87.26	6,160.4	124.0	2,592.0	2,594.9	0.00	0.00	0.00
8,500.0	86.84	87.26	6,165.9	128.7	2,691.7	2,694.8	0.00	0.00	0.00
8,600.0	86.84	87.26	6,171.4	133.5	2,791.5	2,794.6	0.00	0.00	0.00
8,700.0	86.84	87.26	6,176.9	138.3	2,891.2	2,894.5	0.00	0.00	0.00
8,800.0	86.84	87.26	6,182.4	143.1	2,990.9	2,994.3	0.00	0.00	0.00
8,900.0	86.84	87.26	6,187.9	147.8	3,090.7	3,094.2	0.00	0.00	0.00
9,000.0	86.84	87.26	6,193.4	152.6	3,190.4	3,194.0	0.00	0.00	0.00
9,100.0	86.84	87.26	6,199.0	157.4	3,290.1	3,293.9	0.00	0.00	0.00
9,200.0	86.84	87.26	6,204.5	162.1	3,389.9	3,393.7	0.00	0.00	0.00
9,300.0	86.84	87.26	6,210.0	166.9	3,489.6	3,493.6	0.00	0.00	0.00
9,400.0	86.84	87.26	6,215.5	171.7	3,589.3	3,593.4	0.00	0.00	0.00
9,500.0	86.84	87.26	6,221.0	176.4	3,689.1	3,693.3	0.00	0.00	0.00
9,518.1	86.84	87.26	6,222.0	177.3	3,707.1	3,711.3	0.00	0.00	0.00
TD at 9518.1	- 8H-24-46 PBH	L							

Formations							
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
	1,952.0	1,952.0	Green River		3.18	87.26	
	2,672.0	2,672.0	Mahogany		3.18	87.26	
	3,797.0	3,797.0	TGR3		3.18	87.26	
	4,622.0	4,622.0	Douglas Creek		3.18	87.26	
	5,007.0	5,007.0	3PT MKR		3.18	87.26	
	5,437.0	5,437.0	Black Shale Facies		3.18	87.26	
	5,651.3	5,647.0	Castle Peak		3.18	87.26	
	6,027.4	5,932.0	Uteland Butte		3.18	87.26	
	6,142.2	5,982.0	CR 1		3.18	87.26	
		6,057.0	CR 1A Base		3.18	87.26	

Plan Annotations				
Measured	Vertical	Local Coor	dinates	
Depth	Depth	+N/-S	+E/-W	
(ft)	(ft)	(ft)	(ft)	Comment
5,474.9	5,474.9	0.0	0.0	Start Build 10.00
6,343.3	6,047.0	25.9	540.8	Start 3174.8 hold at 6343.3 MD
9,518.1	6,222.0	177.3	3,707.1	TD at 9518.1

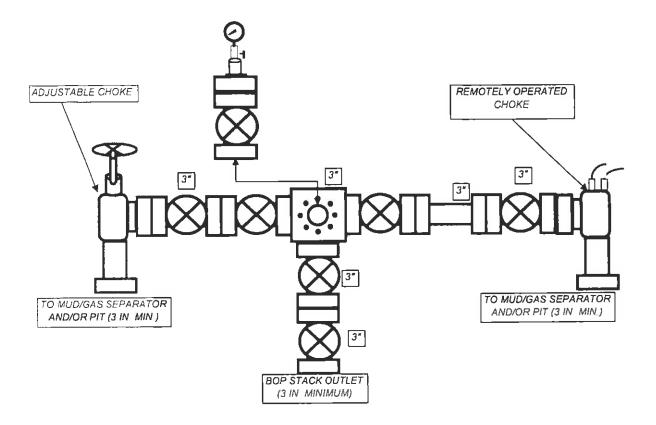
BILL BARRETT CORPORATION

TYPICAL 5,000 p.s.i. BLOWOUT PREVENTER



BILL BARRETT CORPORATION

TYPICAL 5,000 p.s.i. CHOKE MANIFOLD





April 24, 2013

Ms. Diana Mason, Petroleum Technician State of Utah Division of Oil, Gas and Mining 1594 West North Temple, Suite 1210 P. O. Box 145801 Salt Lake City, Utah 84114-5801

RE: Horizontal Drilling
LC Tribal #8H-24-46
Section 24, T4S-R6W, U.S.B.&M.
Duchesne County, Utah

Surface Hole Location: 2147' FNL & 848' FWL, SWNW, 24-T4S-R6W, USB&M Bottom Hole Location: 1980' FNL & 700' FEL, SENE, 24-T4S-R6W, USB&M

Dear Ms. Mason:

Pursuant to the filing of Bill Barrett Corporation's ("BBC") Application for Permit to Drill ("APD") regarding the above-referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Order # 139-87 pertaining to a 640 acre spacing unit for a horizontal or vertical well.

- Section 24 is composed entirely of Tribal minerals.
- Tribal Exploration and Development Agreement #14-20-H62-5500, which includes portions of the subject Section 24 and other lands, allows for the drilling of the #8H-24-46 well.
- Once the well has been drilled, BBC will earn the tribal lease covering the appropriate committed acres being further described in the Exploration and Development Agreement.
- The LC Tribal #8H-24-46 will be perforated no less than 660 feet from the Section 24 Tribal Lease boundary, in accordance with UDOGM Order #139-87.

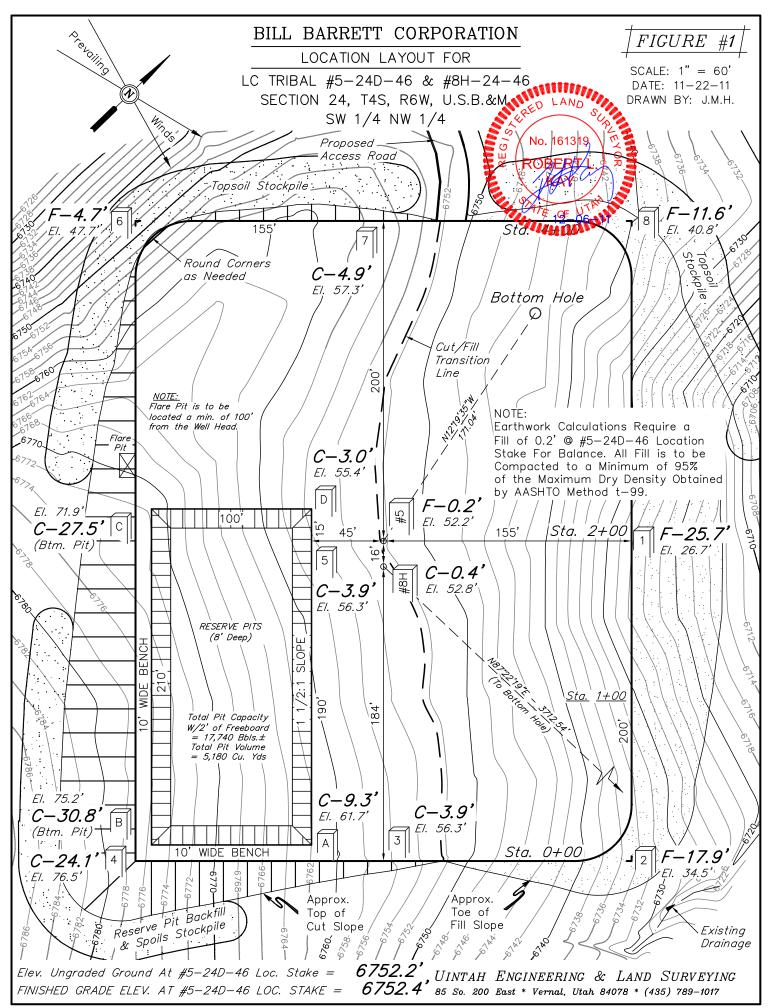
Based on the information provided, BBC requests that the permit be granted pursuant to Order #139-87. If you should have any questions or need further information, please contact me at 303-312-8544.

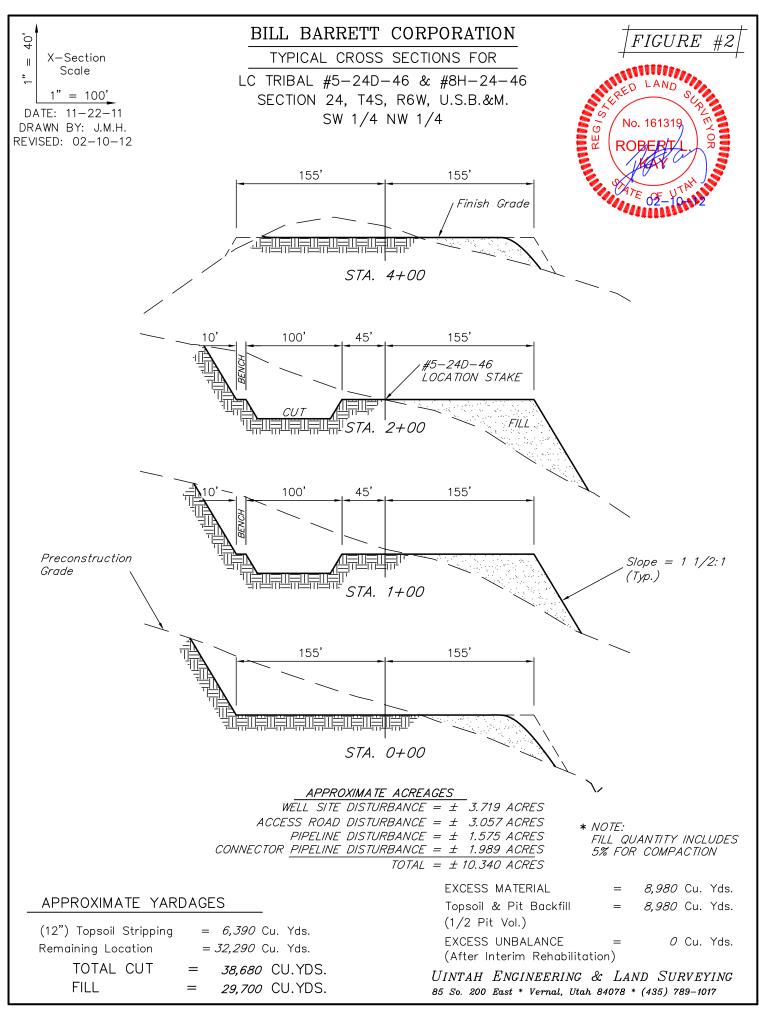
Sincerely,

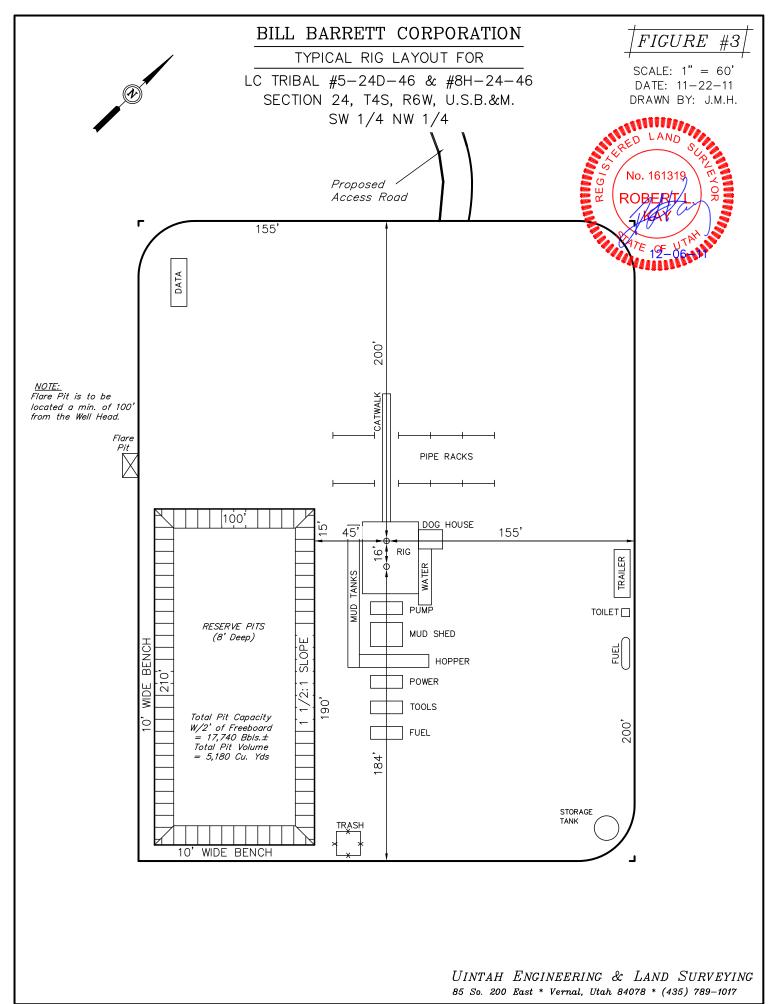
David Watts Landman

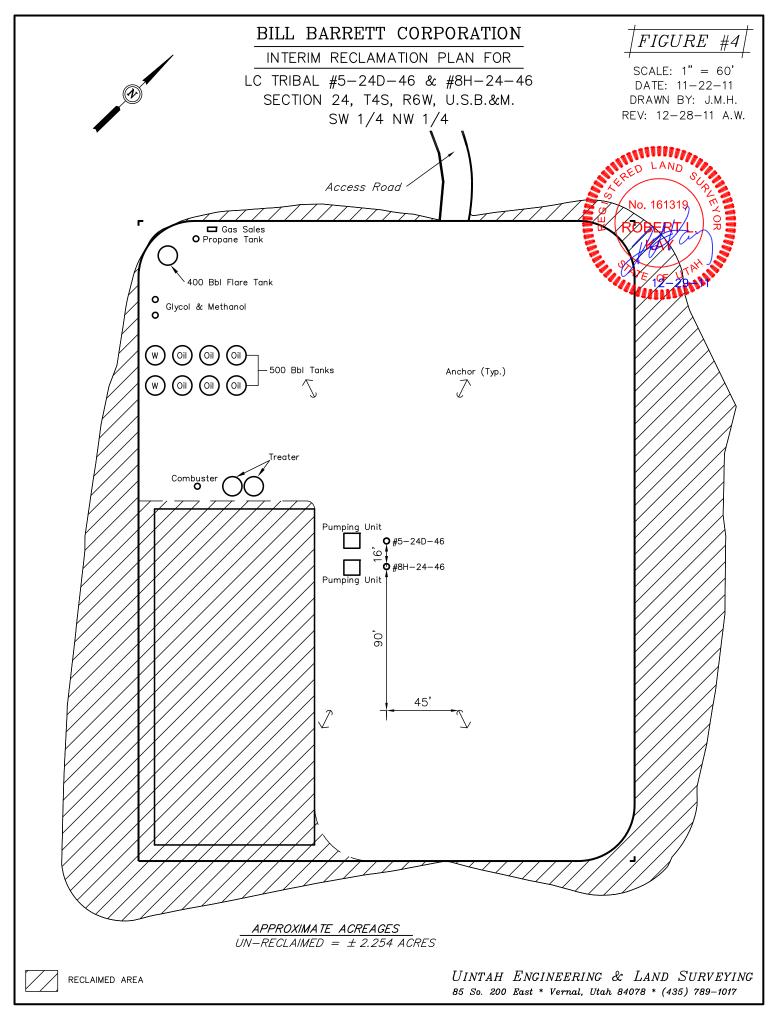
> 1099 18TH STREET SUITE 2300 DENVER, CO 80202 P 303.293.9100 F 303.291.0420

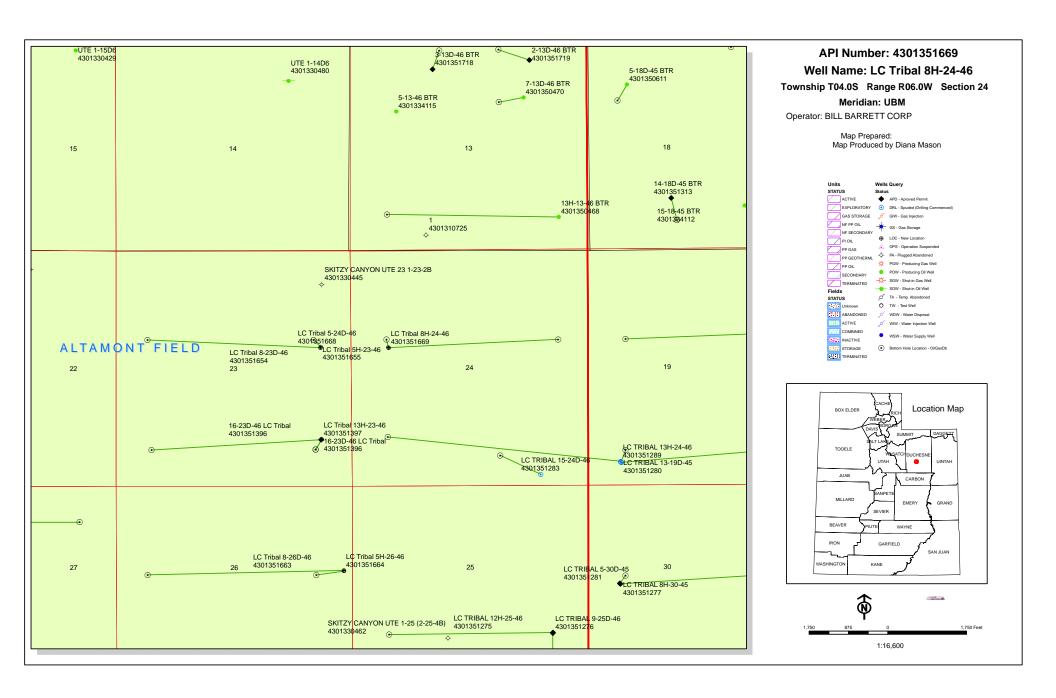
RECEIVED: April 24, 2013











State of Utah
Department of Natural Resources
Division of Wildlife Resources

Contract No.

7 0 1 7 3 9

Amend No.

CONTRACT INFORMATION

Date	4/8	/2013					
Vendor No.							
	Bill Barrett C	Corporation					
		eet, Suite 2300					
City	Denver			CO		80202	
	of work to be					,	
A STATE OF THE PARTY OF THE PAR		Barrett Phase 10 I					
11 0			e e	•		WMAs, W-113-L	
					secs 34, 35, and	36, T4S, R5W, USBM,	
		198976, \$74,788.8			lp /m	e i car	
Receivable	Payable	Land Acquisi	tion	MOU	Easement/R	Right of Way	
NUMBER (OF FTE'S PE	R THIS CONTRA	ACT:		# of AJ's	0	
					# of AL's	0	
					# of B's	0	
					umber of FTE's		
		or hours being worked.					
Example: A contra	ct has \$58,500 for labo	or that is 3-AJ's for 3 months e	each = 1,566 hrs and	1-AL for 1 year = 2088	3 hrs. Total is 3,654 hrs o	or 1.75 FTE's	
DELIVERA	ABLES (Repor	ts, products, materi	ials):			D D	_
		C C	1 1			Due Date:	_
		Copy of record	ied easement			May 1, 2013	\dashv
							_
Effective Da	ate	4/9/2013		Tot	al Amount to be	Received/Paid:	
Expiration I	100000	4/8/2043	•		ription	Amount	
•	1-		•				
Is this a nev	v Project num	ber? Yes		No			
A budget cl	nange form wi	ll need to be subm	itted with al	l contracts, in	cluding amend	ments.	
Unit	Appr	Activity	Function	Program	Object	Amount	SLO Us
Contract Monitor:Greg Hansen							_
Mitigation Funds Monitor:N/A							
Section Chief / Regional Supervisor Approval:							
Carton Caret, Alegional Super 11801 Paper						-	

EASEMENT LEASE AGREEMENT BILL BARRETT CORPORATION'S PHASE 10 DEVELOPMENT

LC Tribal #5-24D-46 & 8H-24-46 Pipeline Corridor

LC Tribal #8-23D-46 & #5H-23-46 Wellpad, Access Road, and Pipeline Corridor LC Tribal #5-35D-45 & #8H-35-45 Wellpad, Access Road, and Pipeline Corridor LC Tribal #16-35D-45 & #13H-35-45 Wellpad, Access Road, and Pipeline Corridor LC Tribal #16-36D-45 & #13H-36-45 Wellpad, Access Road, and Pipeline Corridor LC Tribal #5-36D-45 & #8H-36-45 Wellpad, Access Road, and Pipeline Corridor LC Tribal #8-26D-46 & #5H-26-46 Wellpad, Access Road, and Pipeline Corridor

AVINTAQUIN WILDLIFE MANAGEMENT AREA COTTONWOOD WILDLIFE MANAGEMENT AREA

UDWR Easement Lease No. <u>DUCH-1204EA-0271</u>

THIS NON-EXCLUSIVE EASEMENT LEASE AGREEMENT ("Agreement") is made by and between the Utah Division of Wildlife Resources whose address is 1594 West North Temple, Suite 2110, Salt Lake City, Utah 84114-6301 (hereafter "Surface Owner") and Bill Barrett Corporation, whose address is 1099 18th Street, Suite 2300, Denver, Colorado 80202 (hereafter "Lessee"). Surface Owner and Lessee are collectively referred to as "the Parties". "Easement Lease" means the lease of an easement or right-of-way, for which the purpose, specific use, rights granted, location, term, fees, and other conditions are set forth herein.

EXHIBITS

- A.1 Legal Description of Centerline for LC Tribal #5-24D-46 & 8H-24-46 Pipeline Corridor
- A.2 Depiction of LC Tribal #5-24D-46 & 8H-24-46 Pipeline Corridor
- B.1 Legal Description of Wellpad Perimeter and Access Road and Pipeline Corridor for LC Tribal #8-23D-46 & #5H-23-46 Wellpad
- B.2 Depictions of Wellpad, Access Road, and Pipeline Corridor for LC Tribal #8-23D-46 & #5H-23-46 Wellpad
- C.1 Legal Descriptions of Wellpad Perimeter and Access Road and Pipeline Corridor for LC Tribal #5-35D-45 & #8H-35-45 Wellpad
- C.2 Depictions of Wellpad, Access Road, and Pipeline Corridor for LC Tribal #5-35D-45 & #8H-35-45 Wellpad
- D.1 Legal Descriptions of Wellpad Perimeter and Access Road and Pipeline Corridor for LC Tribal #16-35D-45 & #13H-35-45 Wellpad
- D.2 Depictions of Wellpad, Access Road, and Pipeline Corridor for LC Tribal #16-35D-45 & #13H-35-45 Wellpad
- E.1 Legal Descriptions of Wellpad Perimeter and Access Road and Pipeline Corridor for LC Tribal #16-36D-45 & #13H-36-45 Wellpad
- E.2 Depictions of Wellpad, Access Road, and Pipeline Corridor for LC Tribal #16-36D-45 & #13H-36-45 Wellpad
- F.1 Legal Descriptions of Wellpad Perimeter and Access Road and Pipeline Corridor for LC Tribal #5-36D-45 & #8H-36-45 Wellpad
- F.2 Depictions of Wellpad, Access Road, and Pipeline Corridor for LC Tribal #5-36D-45 & #8H-36-45 Wellpad
- G.1 Legal Descriptions of Wellpad Perimeter and Access Road and Pipeline Corridor for LC Tribal #8-26D-46 & #5H-26-46 Wellpad
- G.2 Depictions of Wellpad, Access Road, and Pipeline Corridor LC Tribal #8-26D-46 & #5H-26-46 Wellpad
- H Surface Use and Reclamation Plan for Lessee's Phase 10 Development Program, Avintaquin and Cottonwood Wildlife Management Areas, Duchesne County, Utah
- I Reclamation Performance Bond Number LPM9090226

70 1739

IN WITNESS WHEREOF, the Parties have executed this Agreement, effective on the date of the last signature below.

SURFACE OWNER

STATE OF UTAH
DEPARTMENT OF NATURAL
RESOURCES, DIVISION OF WILDLIFE
RESOURCES

LESSEE

BILL BARRETT CORPORATION

ACTING DIRECTOR

By:

Gregory Sheehan

Director of Wildlife Resources

Date: 4/15/13

Huntington T. Walker Sr. Vice President - Land

Bill Barrett Corporation

Date:

Funding Approvals:

Division of Wildlife Resources Fiscal

Management

By: I

Linda Braithwaite

Budget Officer

Date:

70 1739

STATE OF UTAH) SS.	
COUNTY OF SALT LAKE)	
Sheehan, who being first duly sworn said t Resources for the State of Utah, that the fo	mike Canain, Assistant Director, 2013 personally appeared before me Gregory hat he is the <u>Director of the Division of Wildlife</u> regoing instrument was executed pursuant to authority de of Utah (23-21-1), and he acknowledged to me that
REBECCA JOHNSON Notary Public State of Utah My Commission Expires on: September 19, 2015 Comm. Number: 613707	Notary Public for the State of Utah Residing at Salt Stake Courty My commission expires 9/19/2015
<u>Huntington T. Walker</u> to me known to be to <u>Corporation</u> who executed the within and execution of the document herein was his	, 2013, personally appeared before me the Sr. Vice President – Land of Bill Barrett foregoing instrument, and acknowledged that the free and voluntary act and deed, for the uses and eath that he is authorized to execute the within
TEALE P. STONE NOTARY PUBLIC STATE OF COLORADO NOTARY ID # 20124021619 MY COMMISSION EXPIRES FEBRUARY 06, 2017	Notary Public for the State of Colorado Residing at My commission expires

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 8/23/2012 API NO. ASSIGNED: 43013516690000

WELL NAME: LC Tribal 8H-24-46

OPERATOR: BILL BARRETT CORP (N2165) PHONE NUMBER: 303 312-8172

CONTACT: Venessa Langmacher

PROPOSED LOCATION: SWNW 24 040S 060W Permit Tech Review:

> SURFACE: 2158 FNL 0859 FWL **Engineering Review:**

> BOTTOM: 1980 FNL 0700 FEL Geology Review:

COUNTY: DUCHESNE

LATITUDE: 40.11972 LONGITUDE: -110.51803 **UTM SURF EASTINGS: 541069.00** NORTHINGS: 4441157.00

FIELD NAME: ALTAMONT LEASE TYPE: 2 - Indian

LEASE NUMBER: 20G0005500 PROPOSED PRODUCING FORMATION(S): UTELAND BUTTE

SURFACE OWNER: 2 - Indian **COALBED METHANE: NO**

RECEIVED AND/OR REVIEWED: LOCATION AND SITING:

✓ PLAT R649-2-3.

Bond: INDIAN - LPM8874725 Unit:

Potash R649-3-2. General

Oil Shale 190-5

Oil Shale 190-3 R649-3-3. Exception

Oil Shale 190-13 **Drilling Unit**

Board Cause No: Cause 139-87 Water Permit: 43-180

Effective Date: 12/6/2011 **RDCC Review:**

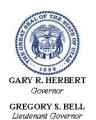
Siting: 4 Producing Grrv-Wstc Wells In Sec Drl Unit Fee Surface Agreement

Intent to Commingle R649-3-11. Directional Drill

Commingling Approved

Comments: Presite Completed

4 - Federal Approval - dmason 27 - Other - bhill Stipulations:



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: LC Tribal 8H-24-46 **API Well Number:** 43013516690000

Lease Number: 20G0005500

Surface Owner: INDIAN Approval Date: 4/30/2013

Issued to:

BILL BARRETT CORP, 1099 18th Street Ste 2300, Denver, CO 80202

Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 139-87. The expected producing formation or pool is the UTELAND BUTTE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-21, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

• Within 24 hours following the spudding of the well - contact Carol Daniels at 801-538-5284

(please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil &

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
 - Requests to Change Plans (Form 9) due prior to implementation
 - Written Notice of Emergency Changes (Form 9) due within 5 days
- \bullet Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
 - Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

Approved By:

For John Rogers Associate Director, Oil & Gas